

*****SAMPLE SPECIFICATION*****

Project Name

05120

Project Location

STRUCTURAL STEEL

Prefabricated Building Columns

- A. General: Prefabricated building columns consisting of load-bearing structural-steel members encased in manufacturer's standard insulating material for fire protection & enclosed in an outer, non-load-bearing steel shell. The load-bearing pipe & tube column will be filled with concrete.
 - i. Concrete Fill: Manufacturer's standard-mix structural concrete, with a 28-day break compressive strength of 3,500 psi, machine mixed & mechanically vibrated during placement to produce concrete fill free of voids.
- B. Fire-Resistance Rating: Provide prefabricated building column listed & labeled by UL which has jurisdiction for ratings indicated, based on testing according to ASTM E 119.
 - i. UL Fire Resistance Design Number: X106 (2 hr.), X104 (3 hr.), X101 (4 hr.)
- C. Column Configuration: Provide columns of sizes & shapes indicated. Fabricate connections to comply with details shown or as required to suit type of structure indicated.
- D. Available Manufacturers: Subject to compliance with requirements, manufacturers offering prefabricated building columns that may be incorporated into the work include but are not limited to: DEAN LALLY LLC. – Queensbury, NY 12804 – (800)323-5514

Shop Priming

- A. Shop prime steel FIRETROL shell & exposed column surfaces, except the following:
 - i. Surfaces embedded in concrete or mortar. Extend priming of partially embedded members to a depth of 2".
 - ii. Surfaces to be field welded.
 - iii. Surfaces to be high-strength bolted with slip-critical connections.
 - iv. Surfaces to receive sprayed-on fireproofing.
 - v. Galvanized surfaces.
- B. Surface preparation: clean surfaces to be painted. Remove loose rust. Loose mill scale, spatter, slag or flux deposits. Prepare surfaces according to SSPC specifications as follows: SSPC-SP 3 "Power Tool Cleaning."
- C. Priming: Immediately after surface preparation, apply primer according to manufacturer's instructions & at a rate recommended by SSPC to provide a dry film thickness of not less than 1.5 mils. Use priming methods that result in full coverage of joints, corners, edges, & exposed surfaces.
- D. Primer: Fabricators standard lead & chromate free, non-asphalt, rust inhibiting primer OR a primer approved for use with the architect's specified finished paint.

Erection

- A. Set structural steel accurately in locations & to elevations indicated & according to AISC specifications referenced in this Section.
- B. Base & bearing plates: Clean concrete, masonry bearing surfaces of bond-reducing materials, roughen surfaces prior to setting base & bearing plates. Clean bottom surface of base & bearing plates.
- C. Maintain erection tolerance of structural steel within AISC's "Code of Standard Practice for Steel Buildings & Bridges."
- D. Reasonable care should be taken during erection & handling to prevent damage or disfigurement of the column's architectural shell.